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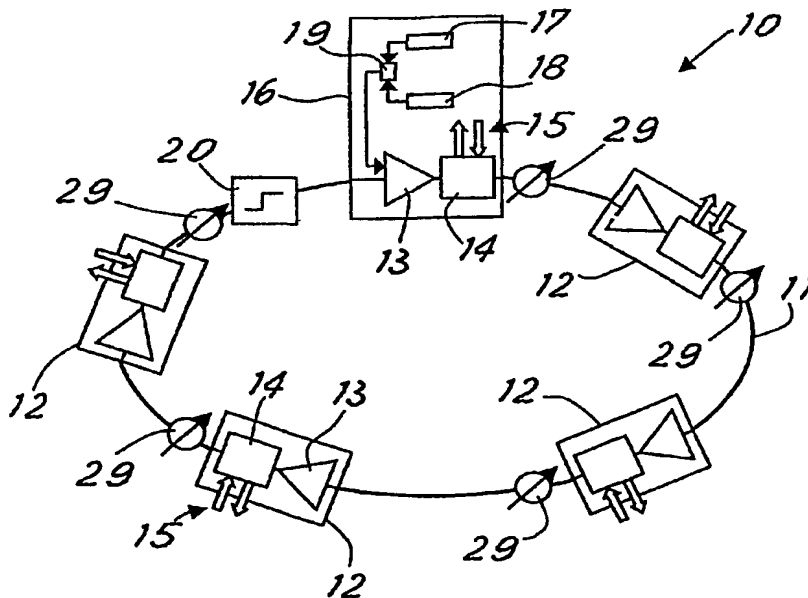
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(54) Title: **LOOPED OPTICAL NETWORK WITH ASE LIGHT RECIRCULATION AND LINK AND NETWORK SURVIVABILITY CONTROL SYSTEM**



(57) Abstract: A looped WDM optical network comprises an optical loop with optical amplifiers (12,16) between the sections of the loop (11) and with ASE recirculation in the loop. At a point of the loop a laser beam is injected and allowed to circulate in the loop with the laser beam being centered around a λ_{LINK} wavelength where it is desired that a lasing peak be generated. This supplies high network strength in terms of section loss variations and greatly improves the OSNR of the WDM signal. High network survivability is also achievable.



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